



#2
1641
W

PATENT

Our Docket: P-PR 24674

RECEIVED

AUG 07 2001

TECH CENTER 1600/2900

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)
David P. Dumas)
Serial No.: 09/853,457 ✓)
Filed: May 10, 2001)
For: COMPOSITIONS AND METHODS FOR)
EPITOPE MAPPING)

I hereby certify that this correspondence is being deposited with the United States Postal Service as Priority mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on August 3, 2001.

By Deborah L. Cadena
Deborah L. Cadena, Reg. No. 44,048

August 3, 2001
Date of Signature

Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. § 1.97, enclosed are references relating to the above-identified application. For the convenience of the Examiner, these references are listed on the attached Form PTO-1449, and a copy of each is enclosed herewith.

It is respectfully requested that these references be considered in the examination of this application and that their consideration be made of written record in the application file.

No fee is deemed necessary in connection with the filing of this Information Disclosure Statement. However, if any fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-0370.

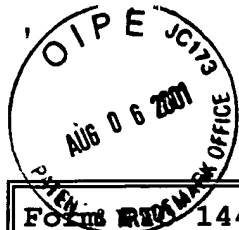
Respectfully submitted,

Date: August 3, 2001

Deborah L. Cadena

Deborah L. Cadena
Registration No.: 44,048
Telephone: (858) 535-9001
Facsimile: (858) 535-8949

Campbell & Flores LLP
4370 La Jolla Village Drive
7th Floor
San Diego, California 92122
USPTO CUSTOMER NO. 23601



Form 1449 US Department of Commerce Patent and Trademark Office	ATTY DOCKET NO: P-PR 4674	SERIAL NO. 09/853 457
	APPLICANT: David P. Dumas	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE: May 10, 2001	GROUP: TECH CENTER 1600/2900

RECEIVED

AUG 07 2001

U.S. PATENT DOCUMENTS

EXAM. INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	4,067,959	1/10/78	Bolz	424	1	
	4,514,508	4/30/85	Hirschfeld	436	518	
	4,562,157	12/31/85	Lowe et al.	435	291	
	4,829,010	05/9/89	Chang	422	58	
	4,880,750	11/14/89	Francoeur	436	501	
	5,143,854	9/1/92	Pirrung et al.	436	518	
	5,149,626	9/22/92	Fleming	435	7.9	
	5,194,392	3/16/93	Geysen	436	518	
	5,264,563	11/23/93	Huse	536	25.3	
	5,270,167	12/14/93	Francoeur	435	7.21	
	5,324,635	6/28/94	Kawase et al.	435	7.94	
	5,338,665	8/16/94	Schatz et al.	435	6	
	5,405,783	4/11/95	Pirrung et al.	436	518	
	5,432,018	7/11/95	Dower et al.	435	5	
	5,445,934	8/29/95	Fodor et al.	435	6	
	5,489,678	2/6/96	Fodor et al.	536	22.1	
	5,527,681	6/18/96	Holmes	435	6	
	5,547,839	8/20/96	Dower et al.	435	6	
	5,707,818	1/13/98	Chudzik et al.	435	7.93	
	5,723,286	3/3/98	Dower et al.	435	5	

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



RECEIVED

2001

Page 2 of 6

Form PTO 1449 US Department of Commerce Patent and Trademark Office	ATTY DOCKET NO: P-PR 4674	SERIAL NO. 09/853,457
	APPLICANT: David P. Dumas	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE: May 10, 2001	GROUP: AUG 07 2001

TECH CENTER 1600/2900

		5,738,996	4/14/98	Hodges et al.	435	7	
		5,763,158	6/9/98	Bohannon	435	4	
		5,837,460	11/17/98	Von Feldt et al.	435	6	
		5,840,479	11/24/98	Little et al.	435	5	
		5,851,776	12/22/98	Valkirs	435	7.1	
		5,858,804	1/12/99	Zanzucchi et al.	436	536	
		6,124,102	9/26/00	Fodor et al.	435	7.1	

FOREIGN PATENT DOCUMENTS

EXAM. INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION (YES/NO)
		84/03564	09/13/84	WO	G01N	33/54	
		86/00991	02/13/86	WO	G01N	33/53	
		86/06487	11/06/86	WO	G01N	33/53	
		95/11922	05/04/95	WO	C07K	16/00	
		97/42507	11/13/97	WO	G01N	33/68	
		99/39210	08/05/99	WO	G01N	33/68	
		00/55627	09/21/00	WO	G01N	33/545	
		00/63810	03/05/86	EPO	G01N	33/543	

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Form PTO 1449 US Department of Commerce Patent and Trademark Office	ATTY DOCKET NO: P-PR 4674	SERIAL NO. 09/853,457
	APPLICANT: David P. Dumas	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE: May 10, 2001	GROUP:

RECEIVED

AUG 07 2001

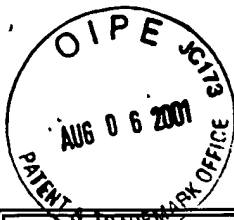
TECH CENTER 1600/2900

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages)

	Anderson et al., "A comparison of selected mRNA and protein abundances in human liver," <u>Electrophoresis</u> , 18:533-537 (1997).
	Ausubel et al., <u>Current Protocols In Molecular Biology</u> (Supplement 47), John Wiley & Sons, New York (1999).
	Beck-Sickinger and Jung, "From Multiple Peptide Synthesis to Peptide Libraries," in <u>Combinatorial Peptide and Nonpeptide Libraries</u> , VHC Publishers, Weinheim, pp.79-109 (1996).
	Borrebaeck, <u>Antibody Engineering</u> , 2d ed., Oxford University Press (1995).
	Breitling and Dübel, <u>Recombinant Antibodies</u> , John Wiley & Sons, New York (1998).
	Eichler et al., "Peptide, Peptidomimetic, and Organic Synthetic Combinatorial Libraries," <u>Med. Res. Rev.</u> , 15:481-496 (1995).
	Fodor et al., "Light-Directed, Spatially Addressable Parallel Chemical Synthesis," <u>Science</u> , 251:767-773 (1991).
	Frank et al., "Combinatorial Synthesis on Membrane Supports by the SPOT Technique Imaging Peptide Sequence and Shape Space," in <u>Combinatorial Peptide and Nonpeptide Libraries</u> , VHC Publishers, Weinheim, pp. 363-386(1996).
	Furka et al., "General method for rapid synthesis of multicomponent peptide mixtures," <u>Int. J. Peptide Protein Res.</u> 37:487-493 (1991).
	Gallop et al., "Applications of Combinatorial Technologies to Drug Discovery. 1. Background and Peptide Combinatorial Libraries," <u>J. Med Chem.</u> , 37:1233-1251 (1994)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Form PTO 1449 US Department of Commerce Patent and Trademark Office	ATTY DOCKET NO: P-PR 4674	SERIAL NO. 09/853,457
	APPLICANT: David P. Dumas	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE: May 10, 2001	GROUP:

RECEIVED

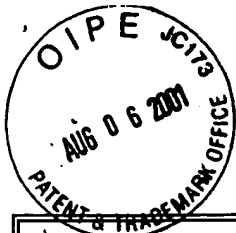
AUG 07 2001

TECH CENTER 1600/2900

	Geysen et al., "Use of peptide synthesis to Probe viral antigens for epitopes to a resolution of a single amino acid," <u>Proc. Natl. Acad. Sci. USA</u> , 81:3998-4002 (1984).
	Gimzewski et al., "Nanoscale Science of Single Molecules Using Local Probes," <u>Science</u> , 283:1683-1688 (1999).
	Gordon et al., "Strategy and Tactics in Combinatorial Organic Synthesis. Applications to Drug Discovery," <u>Acc. Chem Res.</u> 29:144-154 (1996).
	Gordon et al., "Applications of Combinatorial Technologies to Drug Discovery. 2. Combinatorial Organic Synthesis, Library Screening Strategies, and Future Directions," <u>J. Med. Chem.</u> , 37:1385-1401 (1994).
	Haridasan et al., "Peptide Synthesis Using Photolytically Cleavable 2-Nitrobenzyloxycarbonyl Protecting Group," <u>Proc. Indian Natl. Sci. Acad. Part A</u> , 53:717-728 (1987).
	Harlow and Lane, <u>Using Antibodies: A Laboratory Manual</u> , Cold Spring Harbor Press (1999).
	Harlow and Lane, <u>Antibodies: A Laboratory Manual</u> , Cold Spring Harbor Laboratory Press (1998).
	Huse et al., "Generation of a Large Combinatorial Library of the Immunoglobulin Repertoire in Phage Lambda," <u>Science</u> 246:1275-1281 (1989).
	Jonassen et al., "Discovery of Local Packing Motifs in Protein Structures," <u>Proteins: Structure, Function and Genetics</u> , 34:206-219 (1999).
	Kang et al., "Linkage of recognition and replication functions by assembling combinatorial antibody Fab libraries along phage surface," <u>Proc. Natl. Acad. Sci. USA</u> , 88:4363-4366 (1991).

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



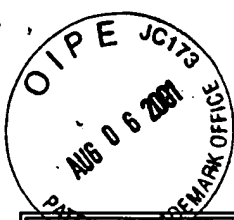
Form PTO 1449 US Department of Commerce Patent and Trademark Office	ATTY DOCKET NO: P-PR 4674	SERIAL NO. 09/853,457
	APPLICANT: David P. Dumas	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE: May 10, 2001	GROUP:

RECEIVED
AUG 07 2001
TECH CENTER 1600/2900

	Lu et al., "Single-Molecule Enzymatic Dynamics," <u>Science</u> , 282:1877-1882 (1998).
	Moult, "Predicting Protein Three-Dimensional Structure," <u>Curr. Opin. Biotechnol.</u> , 10:583-588 (1999).
	Osguthorpe, "Ab initio protein folding," <u>Curr. Opin. Struct. Biol.</u> , 10:146-152 (2000).
	Rees et al., <u>Protein Engineering: A practical approach</u> , IRL Press (1992).
	Rodda et al., "Epitope Mapping With the Use of Peptide Libraries," in <u>Combinatorial Peptide and Nonpeptide Libraries</u> , VHC Publishers, Weinheim, pp.305-326 (1996).
	Savoca et al., "Epitope mapping employing immobilized synthetic peptides, How specific is the reactivity of these peptides with antiserum raised against the parent protein?" <u>J. Immunol. Methods</u> , 141:245-252 (1991).
	Selbig et al., "Decision tree-based formation of consensus protein secondary structure prediction," <u>Bioinformatics</u> 15:1039-1046 (1999).
	Sofia, "Carbohydrate-based combinatorial libraries," <u>Mol. Divers.</u> , 3:75-94 (1998).
	Udaka et al., "Random Peptide Libraries as Tools in Basic and Applied Immunology," in <u>Combinatorial Peptide and Nonpeptide Libraries</u> , VHC Publishers, Weinheim, pp.349-362 (1996).
	Valerio et al., "Multipin peptide synthesis at the micromole scale using 2-hydroxyethyl methacrylate grafted polyethylene supports," <u>Int. J. Peptide Protein Res.</u> , 42:1-9 (1993).

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Form PTO 1449 US Department of Commerce Patent and Trademark Office	ATTY DOCKET NO: P-PR 4674	SERIAL NO. 09/853,457
	APPLICANT: David P. Dumas	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE: May 10, 2001	GROUP:

RECEIVED

AUG 07 2001

TECH CENTER 1600/2900

	Ward et al., "Binding activities of a repertoire of single immunoglobulin variable domains secreted from <i>Escherichia coli</i> ," <u>Nature</u> , 341:544-546 (1989).
	Weiss, "Fluorescence Spectroscopy of Single Biomolecules," <u>Science</u> , 283:1676-1683 (1999).
	Wilson and Czarnik, eds. <u>Combinatorial Chemistry: Synthesis and Application</u> , John Wiley & Sons, New York, 1997.
	Winter and Harris, "Humanized Antibodies," <u>Immunol. Today</u> , 14:243-246 (1993).

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.